

## **ABSTRACT**

**[0027]** A stepping motor includes a stator and a permanent-magnet rotor having a rotor axis. The stator is a stator blade made of soft magnetic materials whose center position is a rotor hole accommodating the rotor. Coils are provided on two sides of the stator blade. Within the stator blade are located three narrow grooves, each of which is disposed at an angle of  $120^\circ$  to one another along radial direction of the rotor. Two ends of the narrow grooves are connected with the said stator blade, and when a current is present in the coils a magnetic-pole end surface surrounding the rotor hole is formed by the part of the motor between two of the narrow grooves. The stator blade of the stepping motor of the present utility model is in integral that is solid, resistant to twist and easy to be machined and assembled.